

## ABSTRACT

Nowadays more and more rapid technological development, it encourages communication or data exchange with a large amount. It's affected the development of the existing fiber optic network in Indonesia. Fiber optic transmission medium is one with a large capacity with high reliability levels. Fiber optic cables installed in the underground (inland cable) and the bottom of the sea (submarine cable). Currently most of the companies both private and governmental uses fiber optic technology to build communication networks, especially for data communication networks and is usually used as the backbone (backbone) of their networks. But in its implementation in the field of underground fiber optic cables are vulnerable to disruption. The disorder may be a theft, or natural interference that may cause the cable is broken or bent. Although its implementation is monitored and carried out by officers patrol the cable but still felt less able to protect the fiber optic cable.

Based on these problems, the final project will be designed a simple system that can send SMS notifications to members know that the fiber optic impaired. Using a gsm modem as a sender and setting up the gsm modem that can send sms to the number of patrol officers on a fiber optic area directly.

The results of this final project is a system that can help the patrollers to detect disturbances in the fiber optic cable in early through notification from of sms messages.

***Keywords : fiber optic, sms***